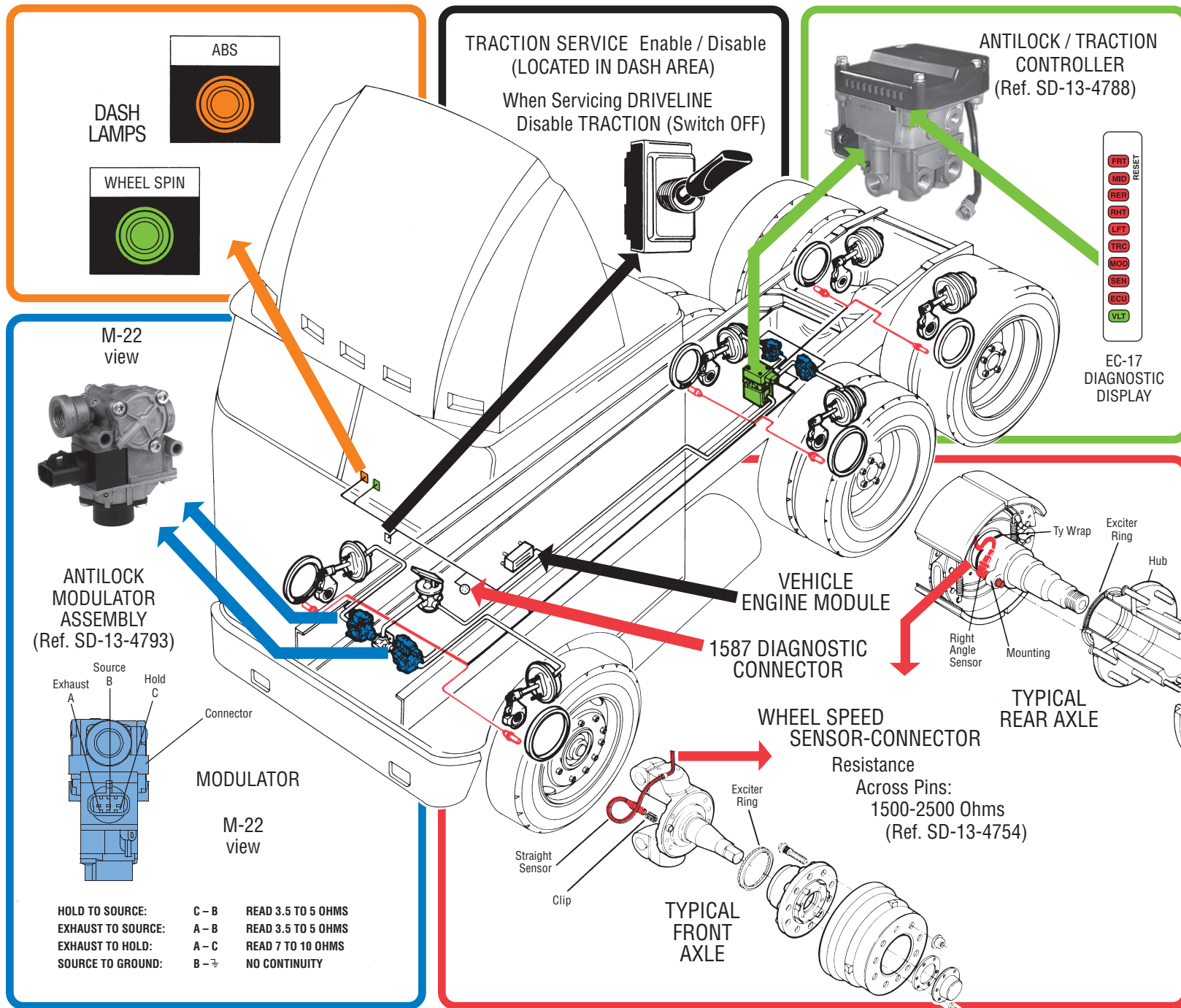


# TROUBLESHOOTING EC-17 ANTILOCK SYSTEMS WITH OPTIONAL TRACTION CONTROL



## INSTRUCTIONS

**START UP:** When power is applied the Antilock and Traction dash warning lamps will illuminate while the electronic Control Unit (ECU) is performing a Self Check, and "Chuff" test. The ABS and Traction Control modulators will be energized during the Chuff test. At the completion of the Chuff test the ABS and Traction dash lamps will flash and extinguish. It is recommended during the initial start up that the brakes be applied to audibly hear the modulators exhaust during the "Chuff" test.

**SERVICE NEEDED:** When an issue is detected at start up, the dash lights will flash and remain illuminated at the completion of the chuff test. When a dynamic wheel speed issue is detected the dash lamps will illuminate as early as 10 mph, indicating a wheel speed issue. The dash lamps notify the driver that all or part of the ABS function has been disengaged and standard air braking is in effect. The ECU will automatically reset most intermittent codes (self healing). In most instances, if the intermittent code has occurred more than five times the issue will be latched and require a magnetic reset. The area of concern will always be identified in the diagnostic display.

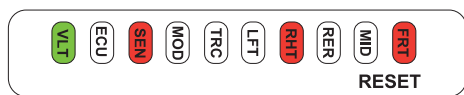
**TRACTION FUNCTION:** The ECU monitors wheel spin. When a spin condition exist, the traction dash lamp will blink continuously indicating the traction control system is active. **IF SERVICING THE VEHICLE DRIVE LINE, TRACTION SERVICE ENABLE / DISABLE SWITCH MUST BE DISABLED.** (The traction dash lamp will be illuminated)

**RESET:** The ECU can be magnetically reset by momentarily holding a magnet against the RESET area on the controller. **SELF CONFIGURING:** During self configuring the ECU will automatically determine the number of sensors and if electronic engine equipped. The ECU will also determine if the vehicle is traction equipped ONLY if the traction switch is toggled prior to magnetically Self Configuring. Holding a magnet against the RESET area for 30 seconds completes Self Configuring.

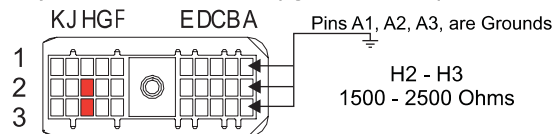


If the LED's shown below  
are illuminated . . .

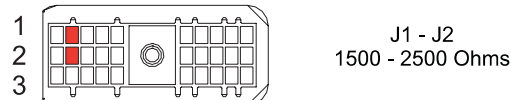
Check the vehicle **WIRING HARNESS  
CONNECTOR** for the proper resistance with  
system power off (ignition off.)



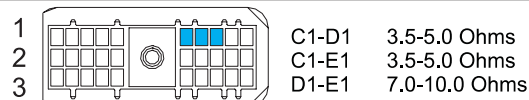
RIGHT  
FRONT  
SENSOR



LEFT  
FRONT  
SENSOR



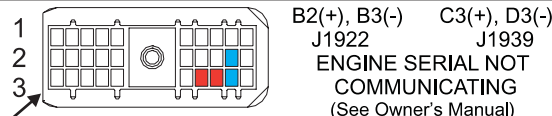
RIGHT  
FRONT  
MODULATOR



LEFT  
FRONT  
MODULATOR

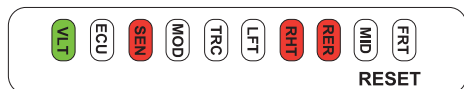


TRACTION  
ENGINE  
SERIAL



*Orient flat side of connector*

*Orient flat side of connector*



RIGHT  
REAR  
SENSOR



LEFT  
REAR  
SENSOR



RIGHT  
REAR  
MODULATOR



LEFT  
REAR  
MODULATOR



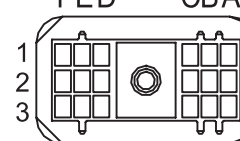
TRACTION  
SOLENOID



**Contacts above should have no continuity to ground, except contacts A1, A2, and A3  
of 30 pin connector. Contacts B1, K2, and K3 supply power to the EC-17.**

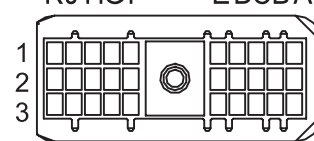
18 Pin Connector

FED CBA



30 Pin Connector

KJ HGF EDCBA



### Most Commonly Encountered Problems That Result In LEDs Being Illuminated.

#### Repair or Replace Components As Necessary

1. Abraded or cut wires in the convoluted tubing near frame clamps.
2. Cut or corroded wires near sharp frame members and frame mounted modulators.
3. Wire jacket worn through from overlapping sensor and modulator wires near frame members and frame mounted modulators.
4. Corroded connectors and connections not properly sealed or damaged seals.
5. Damaged connector latches or connectors not completely seated to mating assemblies.
6. Terminals not completely latched or seated into connectors.
7. Excessive sensor air gap, sensor clip tension, or excessive bearing end play (gently push sensor against wheel hub, or readjust bearings.)
8. Damage to exposed wires exiting or entering the convoluted tubing.
9. Worn, chipped or damaged sensor or modulator.
10. Non functioning antilock controller.

#### If Traction Dash Lamp Only Illuminated, Check/ Repair These Items First:

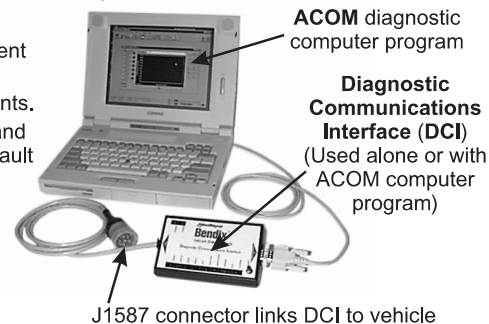
1. Traction enable/disable switch in wrong position.
2. Loss of traction engine serial communication (check service manual).
3. Traction solenoid not connected, or exceeds resistance range.

For units without LED's use the Bendix  
Diagnostic Communications Interface (DCI)



#### EC-17 Computer Analysis

- Locate and diagnose current faults.
- Test components.
- Obtain, view and store vehicle fault history.
- Record performance during vehicle operation.



#### Ordering Information

- Bendix ACOM kit 5004892
- Bendix DCI Kit 5004893
- Kent-Moore PCMCIA card J-38500-2400
- SPX PCMCIA Card ZTSE4455